



**ENGINEERED  
FIBERS  
TECHNOLOGY, LLC**

**KURARAY POLYESTER FIBERS  
For PAPERMAKING APPLICATIONS**

**General Characteristics**

- **Available in a Range of Deniers and Types**
- **Good Moisture Resistance**
- **Good Oil Resistance**
- **Improves Paper Strength (Undrawn and Bicomponent)**
- **Thermal Binding (Bicomponent Sheath-Core)**

**EXHIBIT A**

## KURARAY Polyester Fibers for Paper Making Applications

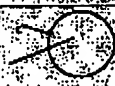
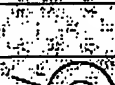

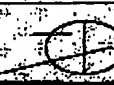

### Subject Fibers

Type No.	Denier	Diameter (μ)	Cut length (mm)	Remarks
EP043	0.5	7	3.5	round cross section, straight
EP053	0.8	9	5	round cross section, straight
EP133	1.3	12	5, 6, 10, 12, 15	round cross section, straight
EP203	1.9	14	5, 10	round cross section, straight
EP2E203	2.2	16	5, 10	T shaped cross section, crimp
EP303	2.8	17	5, 10	round cross section, straight

### UDY (undrawn yarn) Binder Fibers

Type No.	Denier	Diameter (μ)	Cut length (mm)	Remarks
EP10Y	1.1	11	5	round cross section, straight
EP20Y	2.2	15	5	round cross section, straight

### Bicomponent Fibers (Copolyester / Polyester)

Type No.	Denier	Diameter (μ)	Cut length (mm)	Remarks	Cross Section
N720	2.0	14	5, 10	binder type (110°C)	co-polyester polyester 
N720H	2.1	15	5	binder type (130°C)	duff 
N721	1.5	13	5	binder type (110°C) S/C = 60/40	co-polyester polyester 
N700	3.1	23	3	Binder type (130°C) homo fiber	co-polyester 
N790	2.5	16	5	high loft, crimp	co-polyester polyester 

All the above products are produced by Kuraray Tamashima plant, which is approved to ISO9002 quality certifications.